

TERRATEK



TDP330

350W 5 Speed Drill Press



ACL Group (Intl) Ltd



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www.terratekintl.com

User Manual — Please read and retain for future reference

Parts List

Technical Information

Safety Instructions

Using your Tool

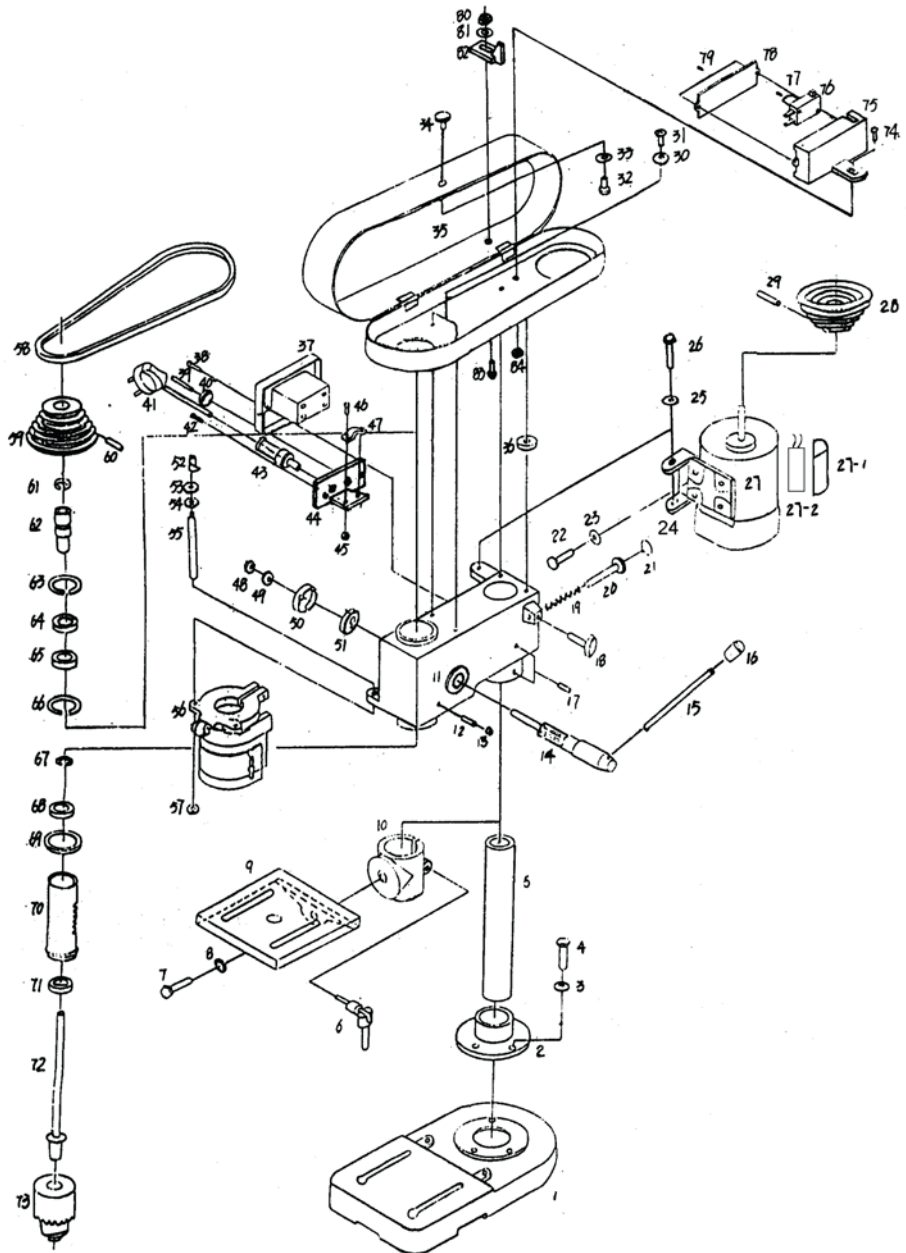
Maintenance

Warranty

No.	Description	No.	Description
1	Base	41	Plug
2	Column Support	42	Screw
3	Washer	43	Rubber Tube
4	Bolt	44	Fixed Plate
5	Column	45	Nut
6	Clamping Lever	46	Screw
7	Bolt	47	Fixed Plate
8	Spring Washer	48	Nut
9	Working Table	49	Nut
10	Clamping Sleeve	50	Spring Set
11	Body	51	Spring Cap
12	Headless Set Screw	52	Pointer
13	Nut	53	Nut
14	Feed Shaft	54	Nut
15	Handle Bar	55	Limit Bolt
16	Knob	56	Chuck Guard
17	Headless Set Screw	57	Nut
18	Shifter Bar	58	V-Belt
19	Spring	59	Spindle Pulley
20	Slide Bar	60	Headless Set Screw
21	Rubber Pad	61	Retaining Ring
22	Bolt	62	Internal Spine Sleeve
23	Washer	63	Retaining Ring
24	Motor Base	64	Ball Bearing
25	Washer	65	Ball Bearing
26	Bolt	66	Retaining Ring
27	Motor	67	Retaining Ring
27-1	Capacitor Box	68	Ball Bearing

No.	Description	No.	Description
27-2	Capacitor	69	Collar
28	Motor Pulley	70	Spindle Sleeve
29	Headless Set Screw	71	Ball Bearing
30	Washer	72	Spindle
31	Screw	73	Chuck
32	Screw	74	Screw
33	Washer	75	Switch Box
34	Knob	76	Micro Switch
35	Pulley Cover	77	Screw
36	Washer	78	Plate
37	Magnetic Switch	79	Screw
38	Screw	80	Screw
39	Cable	81	Washer
40	Plastic Clip	82	Pressing Paw

Exploded Assembly Diagram



NOTICE: Actual product may vary from pictures shown.

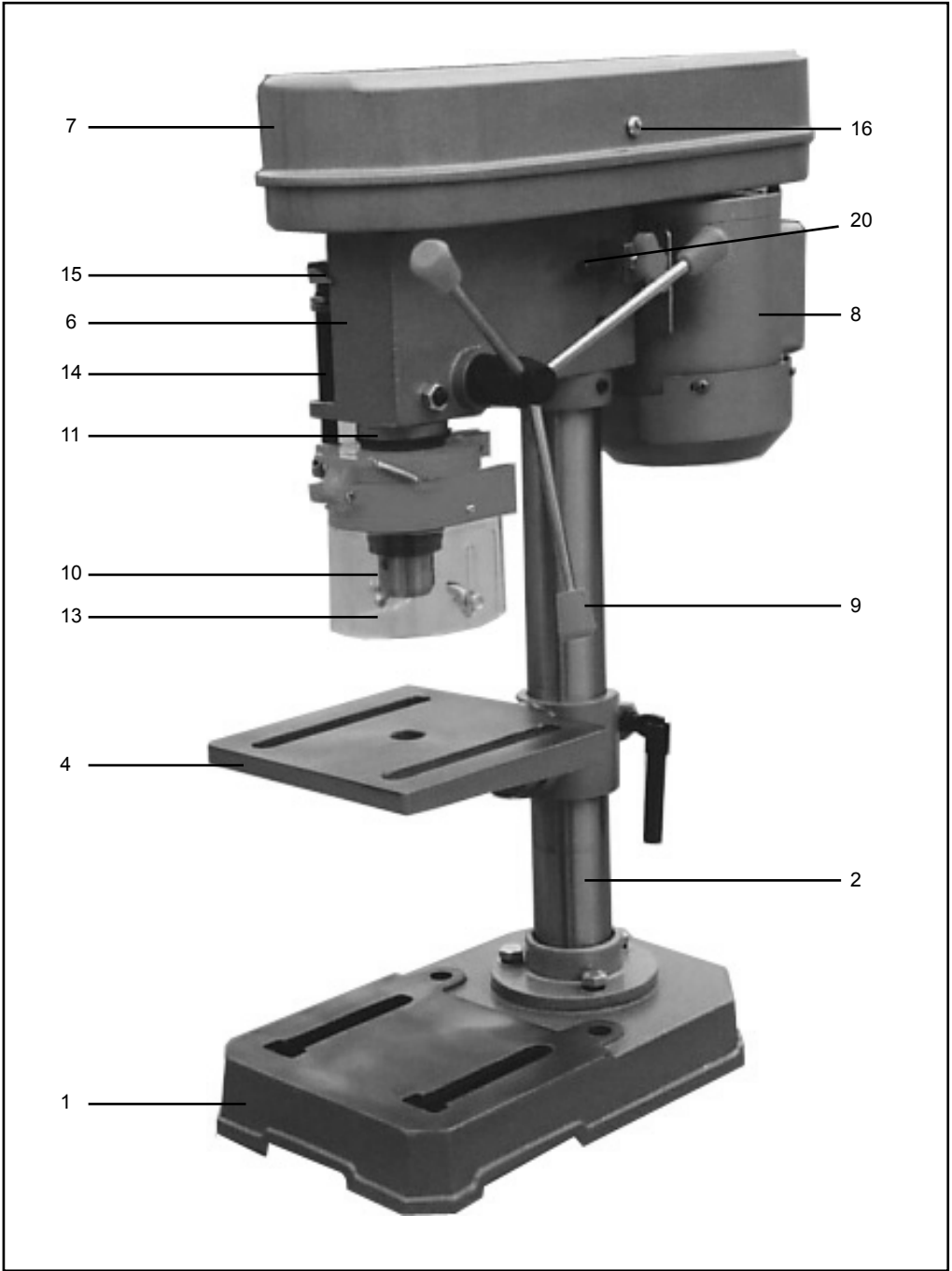


Fig.1

Components and Controls (Fig.1)

1. Machine base
2. Pillar
3. Fixing screw
4. Drill table
5. Clamping screw
6. Machine head
7. V-belt cover
8. Motor
9. Handle grips
10. Scroll chuck
11. Spindle
12. Mounting holes
13. Hinged chip guard
14. Depth stop
15. Depth pointer
16. Screw
17. Cable
18. On switch
19. Off switch
20. Tightening screw
21. Allen key
22. Chuck key

Model: TDP330

Nominal input voltage: 230V ~/ 50 Hz

Power rating: 350 W

Operating mode: S2 15 min.

Motor speed: 1400 min⁻¹

Output speed: 580 – 2.650 min⁻¹

Speed levels: 5

Drill chuck mount: B16

Scroll chuck: Ø 1.5 - 13 mm

Max. drilling capacity: Ø 13 mm

Throat: 104 mm

Drill depth: 50 mm

Pillar diameter: 46 mm

Base size: 314 x 200 mm

Distance Spindle/Table: 200 mm

Distance Spindle/Base: 290 mm

Height: 580 mm

Weight: 18 kg

L_{PA} sound pressure level in idle mode: 61,5 dB(A)

L_{WA} sound power level in idle mode: 74,5 dB(A)

Technical and visual enhancements may be made without prior notice. All dimensions, notes and specifications contained in these operating instructions are therefore subject to change.

Hand/arm vibration is typically less than 2.5 m/s².

Noise and vibration were determined in accordance with EN 61029-1 requirements.



**Read this entire manual before using this product.
Failure to do so can result in serious injury. Save this manual for
future reference.**

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Read and Keep This Manual

Please read carefully all instructions within this manual. Failure to follow all safety warnings can result in serious personal injury. The term "Power Tool" in all of the following warnings refers to your mains operated (corded) or battery operated (cordless) power tool

Important SAFETY Information



This symbol is to warn you of potential personal injury hazards. Please read carefully the notes along side this warning to avoid possible injury or death.

General Safety Rules



WARNING! Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed refers to corded or cordless power tools.

Work area safety

Keep work area clean and well lit. Cluttered or dark areas invite accidents. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

Electrical safety

Before use, ensure that the power outlet you are using matches the plug on your power tool and that the voltage of the outlet matches that of your power tool.

Only use grounded extension cords with power tools fitted with proper plugs and if using outdoors ensure any extension cord is suitable for outdoor use.

Always try to avoid body contact with grounded surfaces, such as radiators, cooking ranges and any other fixed appliance with metal surfaces.

Do not expose your power tool to wet or damp conditions and NEVER use in rain. Check regularly the power cord of your machine and any extension cord that you are using for damage.

Do not carry or pull the machine with the power cord.

Ensure the cord is clear from hot surfaces, oil or sharp objects.

Personal safety

Never use your power tool whilst under the influence of alcohol, drugs or medication.

Tiredness can often cause accidents, stay alert.

Never use your power tool without the correct guards in place.

Always use ANSI approved eye protection and dust mask. Non slip safety shoes and hearing protectors should be worn at all times when using your power tool.

Ensure any dust collecting device supplied with your power tool is connected correctly before use.

Ensure all loose clothing, long hair or jewelry is kept clear of the power tool.

Before plugging your power tool into the power outlet ensure the power tool is in the OFF position.

Check that wrenches or adjusting keys have been removed. Any wrench or key left attached to a moving part can result in injury.

Power tool use and care.

Keep your power tool clean and well serviced at all times.

Never adjust or service any power tool before disconnecting from the mains electricity supply.

Always use the correct tool for the job.

Never force the tool to work harder than it is designed to do.

Never use your power tool with broken parts such as switches, guide fences or leg stands.

ALWAYS keep your power tools away from children.

Keep cutting tools sharp to ensure less stress on the motor.

Only have your power tool serviced by a qualified repair agent using manufacturers recommended parts.

Safety Instructions

4

Warning! When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury, including the following.

Read all these instructions before attempting to operate this product and save these instructions.

1. Keep work area clean
 - Cluttered areas and benches invite injuries.
2. Consider work area environment
 - Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep work area well lit. Don't use power tools in presence of flammable liquids or gases.
3. Guard against electric shock
 - Prevent body contact with grounded surfaces (e.g. pipes, radiators, ranges refrigerators).
4. Keep children away
 - Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.
5. Store idle tools
 - When not in use, tools should be stored in dry, high, or locked-up place, out of the reach of children.
6. Don't force tool
 - It will do the job better and safer at the rate for which it was intended.
7. Use right tool
 - Don't force small tools or attachments to do the job of heavy duty tool. Don't use tools for purposes not intended: for example, don't use circular saw for cutting tree limbs or logs.
8. Dress properly
 - Do not wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and nonskid footwear are recommended when working outdoors. Wear protective covering to contain long hair.
9. Use safety glasses
 - Also use face or dust mask if cutting operation is dusty.
10. Don't abuse cord
 - Never carry tool by cord or yank it to disconnect it from receptacle. Keep cord from heat, oil and sharp edges.
11. Secure work
 - Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
12. Don't overreach
 - Keep proper footing and balance at all times.

13. Maintain tools with care
 - Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and, if damaged, have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean and free from oil and grease.
14. Disconnect tools
 - When not in use, before servicing, and when changing accessories such as blades, bits and cutters.
15. Remove adjusting keys and wrenches
 - Form the habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
16. Avoid unintentional starting
 - Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
17. Outdoor use extension cords
 - When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
18. Stay alert
 - Watch what you are doing. Use common sense. Do not operate tool when you are tired.
19. Check damaged parts
 - Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instructions manual. Have defective switches replaced by an authorized service center. Do not use tool if switch does not turn it on and off.
20. Warning
 - The use of any other accessory or attachment other than recommended in this operating instruction may present a risk of personal injury.
21. Have your tool repaired by an expert
 - This electric appliance is in accordance with the relevant safety rules repairing of electric appliances may be carried out only by experts otherwise it may cause considerable danger for the user.
22. Connect the dust extraction device
 - Wherever there are facilities for fitting a dust extraction system, make sure it is connected and used.

Special safety instructions for Bench Press

The bench press was designed in such a way so as to all but eliminate potential hazards when the machine is properly used. However, there are a few safety precautions to observe in order to ensure that all residual hazards are ruled out.

1. Ensure proper voltage

The voltage must comply with the specifications on the rating plate.
2. Use a socket-outlet with earthing contact

The device may only be operated from an outlet with the properly installed earthing contact.
3. Extension cable

The cord cross section of an extension cable must measure at least 1.5 mm². Always completely unwind a cable reel prior to use. Check the cable for defects.

4. Protection against electrical shock
Keep the device away from moisture. The device must neither be damp nor be operated in a humid environment. Prior to every use, check the device and the mains cable with plug for damage. Avoid bodily contact with earthed parts e.g. pipes, hot elements, etc.
5. Protection against fire and explosion
There are spark producing components inside the device. Do not use the device in the vicinity of combustible liquids or gases. Otherwise there is a risk of fire or explosion.
6. Handle the device with care
Do not use the cable to pull the plug out of the socket. Protect the cable from heat, oil and sharp edges. Keep your tools sharp and clean so that you can work efficiently and safely. Follow the maintenance regulations and the instructions for changing tools.
7. Wear suitable work clothes and personal protection equipment
Loose clothing is not suitable, as it can be caught by moving parts, causing you to become entangled.
Wear a hair net if you have long hair. As a general rule, jewelry should not be worn when working with machine tools. Ensure that you wear safety goggles. Not doing so could result in eye injury.
8. Keep your work area neat and tidy
Disorder in the work area can easily lead to accidents. Do not leave any tools, objects, or cable in the direct vicinity of the work area, as this poses a tripping hazard! Ensure that there is sufficient lighting.
9. Watch out for other persons
Watch out for other persons (especially children) when using the device, and keep them away from your work area. Do not let anyone touch the device or the power cable.
10. Store the tools in a safe location
Store unused devices in a dry, locked location that is out of the reach of children.
11. Avoid overloading the device
Operate the device only within the specified output range. Do not use any low-powered machines for heavy duty work. Do not use tools to perform work for which they were not intended.
12. Maintain a steady foothold
Ensure that you maintain a steady foothold while working. Avoid abnormal body positions and always keep your balance.
13. Pull out the mains plug
Pull out the mains plug when not using the tool, prior to maintenance, and when changing the drill bit.
14. Pull out the power plug.
Ensure that the mains connection is protected by at least a 10 A-rated fuse.
15. Avoid unintentional start-up
Ensure that switch is turned off when plugging the plug into the socket.
16. Keep an eye on your work
Always keep an eye on your machine and the object you are working on. Never use the machine when you are not concentrating or are distracted. Never use the machine when you are under the influence of alcohol or are taking medication.
17. Check the tool for damage
Before using the tool, safety devices and any slightly damaged parts must be carefully checked to ensure that they are in good working order. Visually examine the tool's power cable on a regular basis. All parts must be correctly assembled and meet all the conditions required to ensure proper operation.
Unless otherwise specified in the operating instructions, any damaged safety devices and parts must be properly repaired or replaced by a professionally recognized workshop.
Never use tools with defective On/Off switches.

Warning! Using any plug-in tools and accessories other than those specified in these operating instructions can lead to injury.

Now, please read and follow all steps and procedures included in the operating instructions.

Only use qualified repair agents to service this power tool.

Only use qualified electrician to repair any damaged wiring.

NEVER remove the grounding prong from the power toll or extension cord.

Power Extension Cords

When using any extension cord the machine will suffer a power reduction due to the drop in voltage caused by the length of the cord. This can be partially offset by selecting extension cords with lower gauge wire.


Check all extension cords for damage before use.

Avoid sharp objects.

Do not position the cord where it could be subject to traffic passing over it.

Symbols

IMPORTANT: Some of the following symbols may be used on your tool.

- V.....volts
- A.....amperes
- Hz.....hertz
- ~.....alternating current
- .../m.....revolutions per minute
- class II construction (double insulated)
- Kg.....kilograms
- n₀.....No load speed
- CEConforms to European Harmonised New Approach Directives
- DCDirect Current

Unpacking

Carefully remove the product and any accessories from the box. Make sure that all items listed in the packing list are included.

Packing List

- A) 1 x Bench Drill
- B) 1 x 3mm Allen Key
- C) 1 x 4mm Allen Key
- D) 1 x Chuck Key
- E) 1 x Instruction Manual

Assembly (Fig. 1-4)

Assemble the machine as follows:

1. Position the machine base (1).
2. Fasten the mounting flange with pillar (2) to machine base (1) using three screws (3) and washers.
3. Push the drill table (4) with drill table clamp shaft onto the pillar (2) (Fig. 4).
4. Lock the drill table into the desired position using the clamping screw (5).
5. Place the drill head (6) with V-belt cover (7) and motor (8) onto the drill pillar and fasten using the grub screw (20).
6. Screw the three ball-shaped handles (9) onto the feeder cross handle.
7. Mount the drill chuck onto the spindle.

Note: All bare parts are greased in order to protect them from corrosion. Before mounting the drill chuck (10) onto the spindle (11), both parts must be completely degreased using an environmentally friendly solvent. This ensures optimal transmission of power.

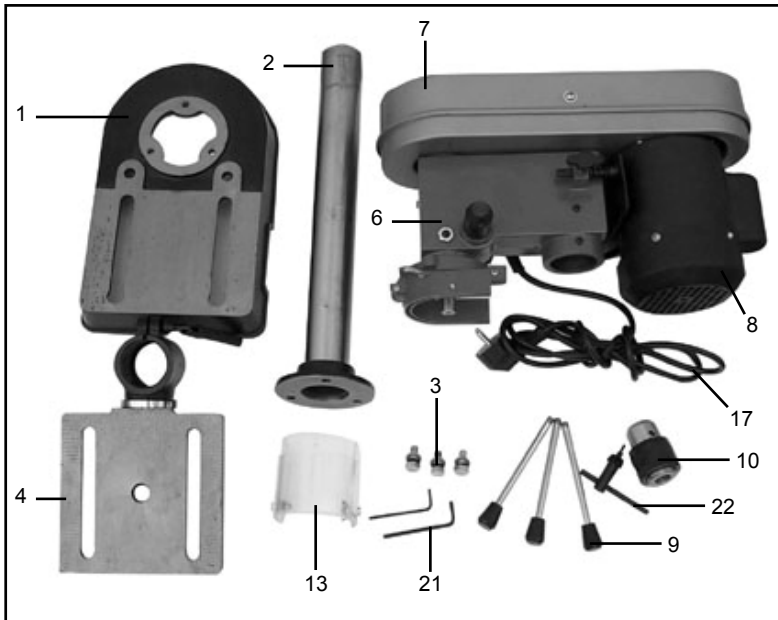


Fig.2

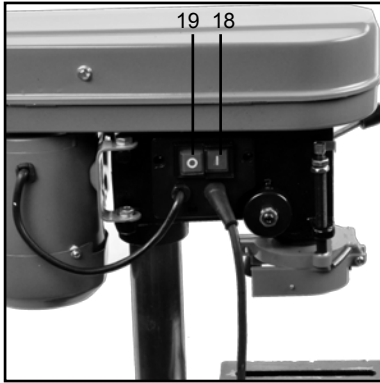


Fig.3



Fig.4

Installing the machine (Fig. 1/2)

Before the drill is started for the first time, it must be solidly and fully mounted on the work area of a stable workbench. Use both mounting holes (12) in the base plate to do this. Ensure that the machine is freely accessible for operation, adjustment and maintenance.

Note: The fixing screws may only be tightened to a point where they do not distort or deform the base plate. Excessive tension can lead to fracture.

Hinged chip guard (Fig. 5)

Unscrew the three recessed head screws (25).

Push the transparent cover (23) into the groove of the red mounting frame (24) and fasten it again with the recessed head screws (25).

The height of the cover (23) is infinitely adjustable and can be locked using the two thumb screws (27).

The chip guard (13) can be flipped upwards to change drill bits; ensure, however, that the chip guard (13) is back in its initial position before restarting the machine.

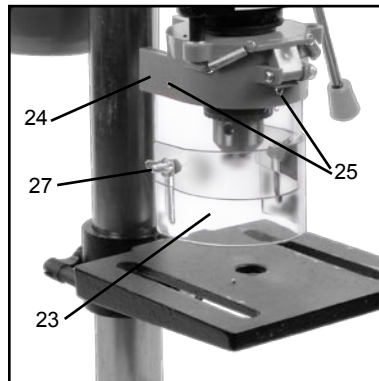


Fig.5

Prior to starting

Ensure that the voltage of the mains supply complies with the specifications on the rating plate. Connect the machine only to a socket with the properly installed earthing contact. The table drill is equipped with a no-volt trip that is designed to protect the operator from an undesired restart following a drop in voltage. Should this occur the machine must be manually restarted.

Operation

Operation

Wear suitable, protective clothing (i.e. rugged and tight-fitting) when working with the table drill. Always wear safety goggles! Long hair should always be bound back with a hair net or a cap!

General (Fig. 3)

To switch on the machine, push in the green On button "I" (18); the machine starts up. To switch off, press the red Off button "O" (19); the device shuts down. Ensure that you do not overload the device. If the sound of the motor drops in pitch during operation, it is being overloaded. Do not overload the device to the point where the motor comes to a standstill. The machine is designed for continuous operation with intermittent load (S2 15 min.). The machine may be operated under a full load for a maximum of 15 minutes, at which time the machine needs to idle for 15 minutes. This prevents the motor from overheating.

Inserting the tool (Fig. 1/2)

Make sure that the power plug is removed from the socket-outlet before changing tools. Only cylindrical tools with the stipulated maximum shaft diameter may be clamped in the scroll chuck (10). Only use a tool that is sharp and free of defects. Do not use tools whose shaft is damaged or which are deformed or flawed in any other way. Use only accessories and attachments that are specified in the operating instructions or have been approved by the manufacturer.

Handling the drill chuck (Fig. 1/2)

Your table drill is equipped with a scroll chuck (10). In order to insert a drill bit, flip up the chip guard (13), insert the drill bit, then tighten down the drill chuck using the supplied chuck key. Pull out the chuck key. Ensure that the clamped in tool is firmly seated.

Caution! Do not leave the chuck key in the clamp hole.

Doing so will cause it to shoot out, which could cause injury.

Setting the speed (Fig. 1/2/7/8)

First switch the machine off, then pull out the mains plug.

The various spindle speeds can be set by moving the V-belt.

Proceed as follows:

1. Remove the screw (16) in order to open the V-belt cover (7).
2. Slacken the tightening screw (20) and push the motor (8) in the direction of the machine head.
3. Move the V-belt to the desired position.
4. Refer to the table for the recommended speeds for different drill bit materials (Fig. 7/10).
5. Tighten the V-belt by pushing the motor (8) back from the machine head (6). Screw the tightening screw (16) back down again. The tension is properly set when the V-belt flexes in the middle by approx. 1 cm when pressed.
6. Close the V-belt cover and screw down using the screw (16). The V-belt cover (7) must always be locked tight, as the machine is equipped with a safety switch that only allows

the machine to be turned on when the V-belt cover (7) is closed.

Caution! Never let the bench press run when the V-belt cover is open. Always pull the mains plug before opening the cover. Never touch the V-belt when it is rotating.

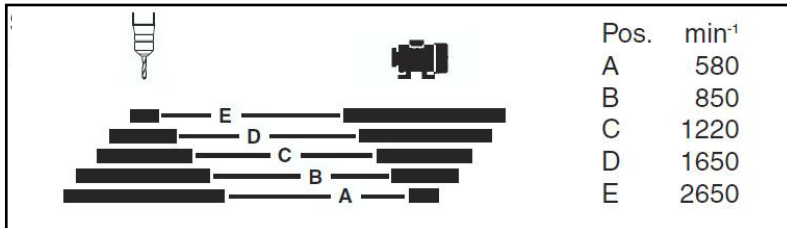


Fig.7

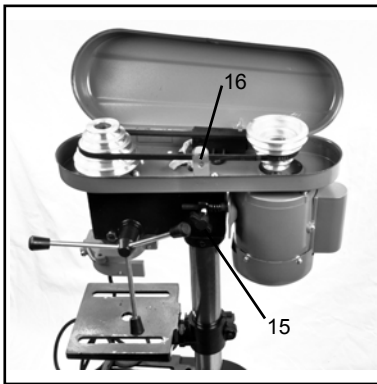


Fig.8



Fig.9

Drill depth stop (Fig. 9)

The drill depth can be set exactly by means of the depth stop (14) and a scale (a) on the front side of the machine head. The machine must be switched off in order to set the depth stop.

1. Insert the required bit (See above section) and turn the setting screws up.
2. Using the handle, move the bit so that its tip just touches the surface of the workpiece and read the value indicated on the scale.
3. Remove the workpiece.
4. Add the required drill depth to the value you read off the scale and use the handle to lower the bit until the value you calculated is indicated on the scale.
5. Turn down the lower setting screw as far as it will go.
6. Secure the setting by turning the upper setting screw against the lower setting screw.

Important! When setting the drill depth of a cylindrical hole you must add the length of the drill tip

Setting the angle of the drill table (Fig. 6)

1. Slacken the carriage bolt (26) under the drill table (4).
2. Set the drill table (4) to the desired angle (which can be read off the scale on the top side of the drill table).

3. Tighten down the carriage bolt (26) in order to lock the drill table (4) into this position.

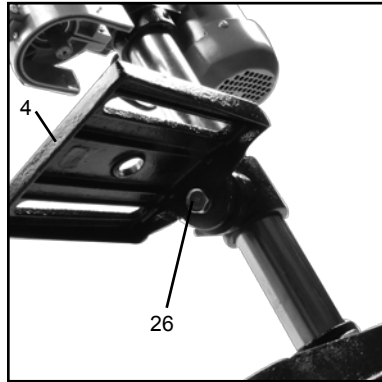


Fig.6

Setting the height of the drill table (Fig. 1/2)

1. Slacken the tightening screw (5).
2. Set the drill table (4) to the desired height by pressing down or lifting up and simultaneously (gently) pushing to the left or right.
3. Screw the tightening screw (5) back down again.

Locking the workpiece into position (Fig. 1)

As a general rule, use a machine vice (14) or another suitable clamping device to lock a workpiece into position.

Never hold the workpiece in place with your hand!

When drilling, the workpiece should be able to travel on the drill table (4) for self-centering purposes.

Ensure that the workpiece cannot rotate. This is best achieved by placing the workpiece/ machine vice on a sturdy block.

Caution! Sheet metal parts must be clamped in to prevent them from being torn up. Properly set the height and angle of the drill table for each workpiece.

There must be enough distance between the upper edge of the workpiece and the tip of the drill bit.

Drilling wood

Please note that sawdust must be properly evacuated when working with wood, as it can pose a health hazard. Ensure that you wear a suitable dust mask when performing work that generates dust.

Working speeds

Ensure that you drill at the proper speed. Drill speed is dependent on the diameter of the drill bit and the material in question.

The table below acts as a guide for selecting the proper speed for various materials.

Note: The drill speeds specified are merely suggested values.

Drill bit Ø	Cast iron	Steel	Iron	Aluminum	Bronze
3	2550	1600	2230	9500	8000
4	1900	1200	1680	7200	6000
5	1530	955	1340	5700	4800
6	1270	800	1100	4800	4000
7	1090	680	960	4100	3400
8	960	600	840	3600	3000
9	850	530	740	3200	2650
10	765	480	670	2860	2400
11	700	435	610	2600	2170
12	640	400	560	2400	2000
13	590	370	515	2200	1840
14	545	340	480	2000	1700
16	480	300	420	1800	1500
18	425	265	370	1600	1300
20	380	240	335	1400	1200
22	350	220	305	1300	1100
25	305	190	270	1150	950

Countersinking and center-drilling

With this table drill, you can also countersink and center-drill. Please observe that countersinking should be performed at the lowest speed, while a high speed is required for center-drilling.

The bench drill is to a large extent maintenance-free.

Keep the device clean.

Pull out the mains plug before doing any cleaning and maintenance work on the machine.

Do not use any harsh, abrasive cleaning solvents.

Ensure that no liquid seeps into the device.

Regrease all bare parts when the work is finished.

The bench press, blank parts of the column, and the drill table especially should be regreased at regular intervals. Use a standard, acid-free lubricating grease to do this.

Caution: Do not use your household refuse bin as a receptacle for oil and grease-soaked cleaning rags or grease and oil sludge. Dispose of these toxic materials in an environmentally-friendly fashion.

Regularly check and clean the ventilation holes.

Store the device in a dry room. Should the device become damaged, do not try to repair it yourself; leave this work to the hands of a qualified electrical technician.

Disposal

Power tools, accessories and packaging should be sorted for environmentally-friendly recycling.

Only for EC countries:



Do not dispose of power tools into household waste!

According to the European Directive 2002/96/EC on waste electrical and electronic equipment and its incorporation into national right, products that are no longer suitable for use must be separately collected and sent for recovery in an environmentally-friendly manner.

Declaration of Conformity

We ACL Group (Intl.) Ltd, England DN6 8LZ declare that the bench drill has been manufactured according to our full quality assurance procedures.

The declaration is to certify that it conforms to CE, EMC, LVD, MD and RoHS directives:

EN55014-1/A1:2009
EN55014-2/A2:2008
EN61000-3-2/A2: 2009
EN61000-3-3: 2008

All provisions of Annex 1 of Council Directive 2004/108/EC – EMC directive

EN61029-1/A11: 2010
EN ISO 12100: 2010

All provisions of Annex 1 of Council Directive 2006/42/EC – the Machinery Directive
2006/95/EC – the Low Voltage Directive
RoHS 2011/65/EU



A handwritten signature in black ink, appearing to be 'Alan Garnett', written over a horizontal line.

Mr. Alan Garnett, UK QA Manager

Environmental Protection

RECYCLING: WASTE ELECTRICAL PRODUCTS SHOULD NOT BE DISPOSED OF WITH HOUSEHOLD WASTE. PLEASE RECYCLE WHERE FACILITIES EXIST. CHECK WITH YOUR LOCAL AUTHORITY OR RETAILER FOR RECYCLING ADVICE.

Please read the following carefully

ACL Group (Intl) Ltd. and/or it's distributor has provided the parts list and assembly diagram as a reference tool only. Neither ACL Group (Intl). Ltd. or its distributor makes any representation or warranty of any kind to the buyer that he or she is qualified to do any repairs or replace any parts of this product. ACL Group (Intl) Ltd. and its distributor expressly state that all repairs or parts replacement should be done by certified or licensed technicians. The buyer assumes all risk and liability arising out of his or her repairs or parts replacement to the original product.

12 Months Limited Warranty

If within 12 months from the date of purchase you experience any problems with your product, please return the product to its distributor/dealer for repair or replacement. This warranty DOES NOT COVER normal wear, or any damage as a result of accidents, misuse, abuse or negligence.

TERRATEK

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